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(54) Title: ANTIMICROBIAL MELAMINE RESIN AND PRODUCTS MADE THEREFROM

(57) Abstract: The present invention relates to melamine resins having incorporated therein one or more antimicrobial agents, where one of the antimicrobial agents is an isothiazolone based compound. The melamine resin is compounded with the antimicrobial as a finely divided powder diluted in a liquid forming a dispersion. The compounded melamine resin is useful for making melamine base decorative laminates used in flooring, countertops, dinnerware and other applications wherein a tough, mar resistant surface having bactericidal properties is required.

INTERNATIONAL SEARCH REPORT

International application No.

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C. DO	OCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim No.
Category	Citation of document, with indication, where appropriate, of the relevant passages		
Y	US 6,071,542 A (TANIMOTO et al.) 06 June 2000, see	entire document.	1-10
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A	A JP 06198607 A (MARUYAMA SANGYO KK) 19 JULY 1994, see entire document.		1-10
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